

**DEPARTMENT OF ENERGY
FY 1999 CONGRESSIONAL BUDGET REQUEST
ENVIRONMENT, SAFETY AND HEALTH**

EXECUTIVE BUDGET SUMMARY

Mission:

The Office of Environment, Safety and Health (EH) develops innovative, unique, and cost-effective approaches for the protection of Department of Energy (DOE) workers, the public, and the environment. This commitment is demonstrated by continuous improvement in program and policy development; independent oversight of the status of environment, safety, health, and safeguards and security programs; and sharing of technical resources, assistance, and information. EH seeks to ensure that resources are applied to DOE activities in a way that prevents accidents or injuries to workers and the public, and prevents harm to the environment. EH is the major DOE cross-cutting source of expertise in disciplines such as environmental protection, nuclear safety engineering, public health, industrial hygiene, radiation protection, construction safety, risk management, epidemiology, and occupational medicine. The EH goal is to leverage scarce resources and skilled personnel to efficiently provide DOE's line management programs with the tools and independent program assessments required to preserve safety and to effectively protect national security interests at DOE sites. Open communication, participation, and performance feedback on EH activities are integral to EH's success.

The Environment, Safety and Health program is funded in two appropriations: (1) Energy Supply and (2) Other Defense Activities. The non-defense EH program consists of technical assistance, the National Environmental Policy (NEPA) Act program, management and administration, and a program direction decision unit which includes the EH Working Capital Fund. The defense EH program includes oversight, domestic and international health studies programs, the Radiation Effects Research Foundation (RERF) program, and a program direction decision unit.

The EH mission is one of DOE's highest priorities. Residual hazards at DOE facilities, especially in the nuclear weapons complex, result from more than 50 years of nuclear materials production and processing under less than optimum conditions, and whose impacts are still being characterized. Therefore, DOE harbors the largest inventories of hazardous nuclear materials in the world outside of the former Soviet Union, as well as large quantities of hazardous chemicals. Due in large part to the sudden end of the Cold War and the resultant rapid shutdown of the production and processing facilities, much of this material -- including plutonium, spent fuel, highly enriched uranium, radioactive waste, radioactive isotopes, and hazardous chemicals -- is stored in aging and deteriorating facilities, and under conditions that are in themselves hazardous. There is still a lack of reliable data for many of these facilities on the most basic safety issues, such as non-compliant electrical and ventilation systems. While facing these challenges, the problem of secure storage of special nuclear material and classified information remains.

DOE is transitioning to new missions of weapons dismantlement, environmental cleanup, and facility decontamination and decommissioning. EH technical experts work with line program managers to develop tools needed to manage safety at DOE facilities more effectively and at less cost to taxpayers. EH has demonstrated that the Department can do its work better, more safely, and at less cost by integrating safety into the planning and

execution of work. EH will continue to work with its partners in the field to ensure that safety is no longer viewed as an "add-on" that produces only paper and needless cost, but as an asset that allows efficient targeting of the most urgent risks, most efficient use of limited resources, and effective accomplishment of work.

The need for effective programs to identify environment, safety, and health concerns, at the project and individual activity level, is qualitatively greater now than in years past. The issuance of a final environment, safety, and health management rule in 1997 by DOE's contractors, and the emphasis in FY 1998 on assuring that prior commitments to fund programs to reduce environment, safety, and health concerns represent important accomplishments, but more remains to be done. The downsizing and realignment of the Defense Programs production efforts will place great stress on old ways of doing business; the limitations on funding environmental management work as needs increase will create conflicts between meeting details of compliance agreements negotiated in earlier years and organizing efforts to pursue an integrated approach to risk reduction. EH's analytical products are shared DOE-wide to assist the sites in appropriate and timely resolution of identified and emerging environment, safety, and health concerns.

The EH overall major goals and objectives include the following:

Goal 1: Provide a standardized corporate independent oversight process to appraise the effectiveness of environment, safety, health, and safeguards and security programs throughout DOE. To accomplish the goal of corporate independent oversight, the following objectives have been established: (a) identify, prioritize, and target Departmental needs for independent oversight; (b) incorporate the DOE's guiding integrated safety management policy and principles into all oversight activities; (c) sustain a coordinated and consistent independent oversight for the DOE; (d) administer an enforcement program that appropriately penalizes significant violations of nuclear safety requirements; and (e) disseminate lessons learned to reinforce good practices.

Goal 2: Provide quality (timely, efficient, and effective) corporate support and technical services. To accomplish this corporate support and technical services goal, the following objectives have been established: (a) identify and support Departmental environment, safety, and health crosscutting programs and technical services that are aligned with critical missions and integral to mission accomplishment; (b) evaluate operational performance data and identify for corporate assessment and action those vulnerabilities that pose urgent risks to DOE workers, the public, and mission accomplishment; (c) further ongoing partnerships with private industry, government agencies, and national safety organizations, to promote information exchange and program benchmarking to enhance DOE safety programs; and (d) continuously improve corporate services through feedback and performance measures.

Goal 3: Provide Departmental requirements, guidance, and policy for environment, safety and health program implementation and measurement. To accomplish this goal, the following objectives have been developed: (a) support ongoing field analysis, interpretation, and application of "WorkSmart" standards (safety guidelines); (b) support field program execution by providing needed regulatory interpretations and implementation guidance; (c) interface with outside regulators, and provide comments on pending regulations pertinent to DOE and

regulatory policies and actions having impact on DOE missions; (d) continue stewardship and improve effectiveness of the new environment, safety, and health orders; and (e) develop, issue, and implement technical standards that apply to DOE work and that rely on appropriate consensus standards.

Goal 4: Provide a National Environmental Policy Act (NEPA) process that encourages managers to use it, builds public trust, and minimizes cost and preparation/review time. To accomplish this NEPA goal, EH has established the following objectives: (a) implement NEPA contract reforms that provide incentives for quality and timely performance; (b) implement changes to improve the NEPA process; (c) implement additional reforms for high priority projects to deal with situations where schedule is of paramount importance; (d) implement enhancements for public involvement to encourage and facilitate public participation throughout the NEPA process; and (e) form a quality team to analyze the environmental impact statement process and recommend improvements.

Goal 5: Provide environment, safety, and health performance and management accountability. To accomplish this goal, EH has established the following objectives: (a) develop and support implementation of a DOE-wide environment, safety, and health budget and planning process that defines scope, identifies costs, prioritizes activities based on relative risk, and allocates resources based on established commitments in a visible manner for implementation of environment, safety, and health program activities; (b) improve environment, safety, and health performance through the application of total quality approaches to environment, safety, and health management processes; and (c) integrate environment, safety, and health in all Departmental business functions.

Goal 6: Support realignment of contract terms and conditions, and support Environment, Safety, and Health management systems development needed to move towards a corporate business performance mode. To accomplish this goal, EH has established the following objectives: (a) develop and support DOE-wide implementation of environment, safety and health budget and planning processes that define scope, identify costs, prioritize activities based on relative risk, and allocate resources based on established commitments; and (b) identify ways for line program managers to improve environment, safety, and health performance as part of work execution systems; and integrate environment, safety, and health in all Departmental business functions.

Goal 7: Conduct EH's mission in an open, trustworthy, and responsive manner. To accomplish this goal, EH's objectives are: (a) establish and implement programs that strengthen the public's trust, confidence, and respect in and for EH; (b) establish and implement programs that strengthen EH's credibility with Departmental and contractor employees; and (c) support the Department's efforts to reduce the volume of national security information and minimize future classification.

Goal 8: Promote the health and safety of DOE's workers and communities surrounding Department sites and support understanding of radiation effects and other hazards on humans. To accomplish this goal, EH's objectives are to increase the understanding of radiation, chemical, and other hazards to DOE workers and the public through (a) assisting the field in the identification and application of effective approaches to prevent injury and illness, and (b) supporting domestic and international health effects information on populations exposed to

releases of varying levels of ionizing radiation.

The legal requirements that affect the activities of the EH organization include all environmental, safety, and health Federal regulations, as well as legislation such as the Atomic Energy Act of 1954, as amended, and the National Defense Authorization Act for Fiscal Year 1995.

Strategy:

EH's intent is to assure that quality, objectivity, responsiveness and innovation are hallmarks of all EH activities. EH focuses on developing management-level analytical products, reducing redundancies, and enhancing staff development. EH serves its principal customers in the following major areas: (a) development of Departmental environment, safety, and health requirements, guidance and interpretations that are effective and efficient to guide program implementation; (b) improvement of environment, safety and health performance and management accountability by supporting the integration of environment, safety, and health considerations into the Department's business and budget planning processes; (c) provision of critical corporate environment, safety and health support and services, including regulatory and industry interface, and technical assistance to improve program management and execution and to assist in the efficient and effective implementation of requirements, and (d) conduct independent oversight activities that provide a comprehensive status of environment, safety, health, and safeguards and security performance at DOE facilities.

Performing new types of hazardous work safely and securely at facilities that were designed to meet the requirements of outdated rules and orders is one of DOE's most critical priorities. Many old, poorly-maintained facilities do not meet current building codes and safety standards. WorkSmart Standards provide a graded approach to developing safety standards that allows the Department to tailor the standards to the work and the facilities. Pilot applications of this process indicate that worker safety can be enhanced while program costs are reduced.

The EH independent oversight program has been extremely useful in helping the Department effectively identify and target unacceptable risk. Comprehensive environment, safety and health assessments provide DOE management with validated, professional appraisals of the site's performance, by identifying areas of greatest risk in terms of both immediate hazards and overall program management. The foundation of this approach is an assessment of management effectiveness based on DOE's integrated safety management policy, and the guiding principles of safety management contained in that policy. These assessments supply DOE management with validated, professional appraisals of the site's performance. The evaluation against the guiding principles of safety management permits objective program analysis based on the principles of sound safety management. Although much effort remains, changes in the Department's ability to apply resources to areas of greatest need have already been observed, and will become increasingly evident in efficiency in addressing environmental, safety, health, and safeguards and security issues.

The rapid transition of the Department to a business management model with its emphasis on gaining cost-efficiencies, privatization and innovative management structures in the field has brought concomitant changes in how EH functions. Special emphasis will be given to self-assessment and self-reporting by field elements as a source of performance information, coupled with increased emphasis on EH performance analysis. Likewise, increasing priority will be given to programs that help move DOE line management from outdated environment, safety and health management

approaches and systems, and to programs that facilitate the exchange of innovative business or environment, safety and health management practices that are preventive and cost-efficient in nature. From a technical safety assistance perspective, special emphasis will be given to urgent programmatic needs such as safely managing the decommissioning and decontamination of aging DOE facilities, and hazardous waste management.

EH will continue to build on its strong record of cutting costs without risking the safety and health of DOE workers, the quality of the environment, or the quality of the health studies program. Even as challenges have grown, the EH budget has been reduced by cutting administrative overhead costs and focusing on the highest priority needs. An EH staffing plan has identified the most critical functions and closely matched personnel to fit those needs. Functions of lower priority will continue to be eliminated. This will result in a cut in Federal personnel from 375 in Fiscal Year 1998 to 355 in FY 1999. EH has also analyzed how it utilizes support contractors and set specific criteria for their limited use.

The medical surveillance for former workers program, required by the 1993 Defense Authorization Act, could potentially cost hundreds of millions of dollars. The Office of Environment, Safety and Health has worked over the past three years to develop a cost-effective approach that relies on feasibility studies to target populations most at risk. In FY 1996, EH awarded contracts to six consortia of universities, labor unions, and health specialists. In FY 1997, each of these consortia began conducting the feasibility assessment phases of their projects. In addition, the Office issued a request for proposals for major sites not addressed as part of the first solicitation. In FY 1998, the medical surveillance phase of the first set of projects begins and the feasibility assessments for the newly awarded cooperative agreements will be initiated. In FY 1999, nine consortia will be working on the medical surveillance phases of their programs.

Performance Measures

The Office of Environment, Safety and Health (EH) continues to shift from a reactive approach to an emphasis on prevention and excellence in protecting worker and public safety and health and in achieving effective environmental standards.

EH serves as the Departmental advocate for institutionalizing effective and integrated safety management, which focuses on the key tenets of work planning, hazard analysis and hazard control. Success is measured by the implementation of enhanced work planning systems at DOE sites.

EH incorporates the existing risk based environment, safety, and health planning and budgeting process into all new major Management and Operating contracts and those that are scheduled for renewal. Success is measured by inclusion of environment, safety, and health provisions in Management and Operating contracts.

EH supports the systematic collection, analysis, and sharing of data on worker illness and injury. Success is measured by the early detection of emerging health issues and the implementation of improved health and safety practices at DOE sites.

By completing vulnerability studies to identify environment, safety, and health vulnerabilities across the complex, serious vulnerabilities will be

reduced. Success will be measured by the reduction of the number of unaddressed serious vulnerabilities at DOE facilities from several dozen to zero. EH supports the systematic collection, analysis, and sharing of data on worker illness and injury. Success is measured by the early detection of emerging health issues and the implementation of improved health and safety practices at DOE sites.

EH's multi-disciplinary, fully integrated oversight process for environment, safety, health, and security evaluations has matured. Success is measured by the degree to which oversight activities serve as a catalyst for improvement, and bring significant issues to senior management's attention.

EH is implementing appropriate standards for work in progress that will provide for the health and safety of workers, the public and the environment. Success will be measured by the completion of projects initiated in FY 1997, with full implementation of this process into the Department's operations in FY 1998 and FY 1999.

The field, contractors, and outside organizations continue to adopt EH standards. Success is measured by a decrease in lost work days due to occupational illness or injury, a decrease in the number of personnel contaminations with radionuclides, and a decrease in the number of serious accidents where policy is a root cause of the problem.

Date: _____

Peter N. Brush
Acting Assistant Secretary
Environment, Safety and Health

**ENVIRONMENT, SAFETY AND HEALTH
PROGRAM FUNDING PROFILE
(Dollars in Thousands)**

<u>Sub-Program</u>	<u>FY 1997 Current Appropriation</u>	<u>FY 1998 Original Appropriation</u>	<u>FY 1998 Adjustments</u>	<u>FY 1998 Current Appropriation</u>	<u>FY 1999 Request</u>
<u>EH Non-Defense</u>					
Operating Expenses					
Technical Assistance	\$ 25,350	\$ 21,444	0	\$ 21,444	\$ 19,302
NEPA	3,500	3,000	0	3,000	3,000
Management and Administration	19,350	18,056	-782 ¹	17,274	15,300
Program Direction	<u>37,300</u>	<u>23,550</u>	<u>0</u>	<u>23,550</u>	<u>38,398</u>
Subtotal	\$ 85,500	\$ 66,050	0	\$ 65,268	\$ 76,000
Adjustment (use of prior year balances)	-1,421	0	-1,295	-1,295	0
Rescission	<u>-1,497</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal, EH Non-Defense	\$ 82,582	\$ 66,050	-2,077	\$ 63,973	\$ 76,000
<u>EH Defense</u>					
Operating Expenses					
Oversight	14,526	14,015	0	14,015	13,775
Health Studies					
RERF	15,000	14,000	0	14,000	14,000
All Other	38,568	45,985	0	45,985	41,456
Program Direction	10,706	20,000	0	20,000	4,769
Adjustment (use of prior year balances)	<u>0</u>	<u>0</u>	<u>-476</u>	<u>-476</u>	<u>0</u>
Subtotal, EH Defense	\$ 78,800	\$ 94,000	-476	\$ 93,524	\$ 74,000
TOTAL	\$ 161,382	\$ 160,050	-2553	\$ 157,497	\$ 150,000

¹ Training general reduction.

**ENVIRONMENT, SAFETY AND HEALTH
STAFFING PROFILE**

<u>Sub-Program</u>	FY 1997 Current <u>Appropriation</u>	FY 1998 Original/Current <u>Appropriation</u>	FY 1999 <u>Request</u>
<u>FTEs</u>			
Non-Defense	301	172	309
Defense	<u>95</u>	<u>203</u>	<u>46</u>
TOTAL	396	375	355

ENVIRONMENT, SAFETY AND HEALTH
(Dollars in thousands)

PROGRAM FUNDING BY SITE

<u>Field Offices/Sites</u>	<u>FY 1997 Current Appropriation</u>	<u>FY 1998 Original Appropriation</u>	<u>FY 1998 Adjustments</u>	<u>FY 1998 Current Appropriation</u>	<u>FY 1999 Request</u>
Albuquerque Operations Office					
Los Alamos National Laboratory	\$ 465	\$ 310	0	\$ 310	\$ 200
Mason & Hanger	75	80	0	80	80
Sandia National Laboratory	180	200	0	200	190
Operations Office	<u>108</u>	<u>115</u>	<u>0</u>	<u>115</u>	<u>105</u>
Subtotal	828	705	0	705	575
Chicago Operations Office					
Argonne National Laboratory	1,950	985	0	985	725
Brookhaven Science Associates	3,416	3,590	0	3,590	3,340
Operations Office	<u>38</u>	<u>1,540</u>	<u>0</u>	<u>1,540</u>	<u>2,040</u>
Subtotal	5,404	6,115	0	6,115	6,105
Idaho Operations Office					
Idaho National Engineering & Env. Lab.	2,261	2,090	0	2,090	1,810
Operations Office	<u>3,599</u>	<u>2,850</u>	<u>0</u>	<u>2,850</u>	<u>2,810</u>
Subtotal	5,860	4,940	0	4,940	4,620
Nevada Operations Office					
Bechtel Nevada	2,688	2,890	0	2,890	2,680
Oak Ridge Operations Office					
Lockheed Martin Energy Systems	310	300	0	300	270
Oak Ridge National Laboratory	8,312	6,706	0	6,706	5,670
Oak Ridge Institute for Science & Educ.	5,095	5,060	0	5,060	4,850
Office of Scientific & Technical Info.	395	355	0	355	220
Operations Office	<u>2,311</u>	<u>1,500</u>	<u>0</u>	<u>1,500</u>	<u>0</u>
Subtotal	16,423	13,921	0	13,921	11,010

ENVIRONMENT, SAFETY AND HEALTH
(Dollars in thousands)

PROGRAM FUNDING BY SITE

<u>Field Offices/Sites</u>	<u>FY 1997 Current Appropriation</u>	<u>FY 1998 Original Appropriation</u>	<u>FY 1998 Adjustments</u>	<u>FY 1998 Current Appropriation</u>	<u>FY 1999 Request</u>
Ohio Field Office					
Fluor Daniel	\$ 35	\$ 40	0	\$ 40	\$ 40
Richland Operations Office					
Pacific Northwest Laboratories	13,910	9,855	0	9,855	8,895
Hanford Environmental Health Foundation	170	190	0	190	180
Operations Office	<u>541</u>	<u>360</u>	<u>0</u>	<u>360</u>	<u>330</u>
Subtotal	14,621	10,405	0	10,405	9,405
Rocky Flats Field Office					
Kaiser Hill Co.	1,262	1,400	0	1,400	1,280
Oakland Operations Office					
Lawrence Berkeley Laboratory	516	460	0	460	550
Lawrence Livermore Nat'l Laboratory	3,271	3,280	0	3,280	3,040
Operations Office	<u>3,936</u>	<u>16,884</u>	<u>0</u>	<u>16,884</u>	<u>16,720</u>
Subtotal	7,723	20,624	0	20,624	20,310
Savannah River Operations Office					
Operations Office	1,115	1,240	0	1,240	1,150
Washington Headquarters (Includes Program Direction with Working Capital Fund)	108,341	97,770	-782 ¹	96,988	92,825
Adjustment (Use of Prior Year Balances)	-1,421	--	-1,771	-1,771	--
Rescission	<u>-1,497</u>	<u>--</u>	<u>0</u>	<u>--</u>	<u>--</u>
TOTAL	\$ 161,382	\$ 160,050	-2,553	\$ 157,497	\$ 150,000

¹ Training general reduction.

**DEPARTMENT OF ENERGY
FY 1999 CONGRESSIONAL BUDGET REQUEST
ENERGY SUPPLY
(Tabular dollars in thousands, Narrative in whole dollars)**

ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE

PROGRAM MISSION

The Office of Environment, Safety and Health (EH) is the Department of Energy's (DOE) corporate resource for technical support in the areas of nuclear safety, occupational safety and health, environmental compliance, and health studies. EH administers an integrated program to analyze facility operations, assist line management to implement major safety assurance or environmental compliance programs, and to develop policies and standards related to safety and health. EH maintains an expert Federal staff in the disciplines of nuclear safety, radiation protection, environmental protection, industrial hygiene, industrial safety, public health, construction safety, and risk management. The staff applies its expertise to facilities and programs across the complex for each of DOE's major program functions. EH efforts have been concentrated into three business lines within one decision unit: Technical Assistance, National Environmental Policy Act (NEPA), and Management and Administration; and a program direction decision unit which includes the EH Working Capital Fund. These activities comprise a wide range of corporate-based functions supporting key departmental missions to address emerging program vulnerabilities, significant or new nuclear and industrial hazards, and improved methods of managing or implementing programs. A substantial portion of these activities are directed at crosscutting Department of Energy (DOE)-wide environment, safety and health functions which are analogous to those performed by any corporate central office, e.g., supporting Departmental accreditation programs for radiation protection monitoring, administering DOE's Voluntary Protection Program for enhancing safety management, collecting and analyzing DOE-wide environment, safety and health performance data to identify adverse trends or issues, and to assess corporate vulnerabilities that, if left unmitigated, could lead to serious accidents or substantial fiscal liabilities. Given EH's close contacts with private industry, regulatory agencies, and national environment, safety and health organizations, activities are also directed at facilitating information and program exchanges between DOE line management and counterparts in the private sector to improve safety management. This internal DOE corporate function extends to assisting DOE-wide improvements in critical management responsibilities for planning work ("Enhanced Work Planning"), applying regulations ("HAZWOPER guidance"); and radiation protection program management. Beyond the traditional corporate services provided, these activities are directed at supporting line program efforts to prevent injuries and illnesses from occurring, and to avoid the major mission risks attendant to the often unprecedented hazards that must be managed effectively across DOE.

The activities performed by the three business lines are as follows:

TECHNICAL ASSISTANCE: These activities comprise a range of corporate-based functions supporting key departmental missions to address emerging program vulnerabilities, significant or new nuclear and industrial hazards, and improved methods for managing or implementing safety programs. Also, support is provided to: crosscutting Department-wide functions which ensure the quality of environment, safety, and health monitoring; safety and health protection of Federal and contractor employees; programs for strengthening safety performance; and communication of environment, safety and health program guidance and practices. Overall activities focus on the safety and health of workers and the public, protection of the environment and Federal facilities, and prevention and/or mitigation of effects of unforeseen occurrences.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): This program provides a process that enhances managers' decisionmaking, builds public trust, and minimizes the cost and time for document preparation and review while maintaining quality.

MANAGEMENT AND ADMINISTRATION: These activities provide for the centralized management and direction of EH; systems support; organization budgeting, financial control, and procurement; information management; technical training and professional development; and DOE-wide direction and assistance by EH for the environment, safety, and health business and budget planning execution and tracking processes.

The **GOALS** of EH **Non-Defense** programs are:

- Conducting corporate support and services that consistently provide quality, timely, efficient, and effective environment, safety, and health programs that meet priority needs and receive high customer satisfaction.
- Providing an effective system of policies, requirements, guidance, and technical standards that significantly increase the protection of the environment and enhance public and worker safety and health.
- Facilitating the effective implementation of the NEPA process and fostering public trust.
- Establishing and maintaining a Department-wide business and budget planning and execution processes that identify environment, safety and health vulnerabilities and enable effective line program allocation and expenditure of environment, safety, and health resources.
- Establishing and maintaining an integrated information management program that will enhance environment, safety and health performance.
- Improving the performance and effectiveness of the Department's workforce and contractor employees in matters related to environment, safety and health.

The **OBJECTIVES** related to these goals are:

- Provide specialized technical assistance to line management to address environment, safety and health issues; identify processes that lead to WorkSmart standards and improved performance; and provide an exchange of operating experience and lessons learned.
- Support programs to improve exposure assessment and medical monitoring of the DOE workforce.
- Identify policy, requirements, guidance, and standards in existing environment, safety, and health directives, and integrate directives' component parts into a new environment, safety, and health directive system, and into a standards-based safety management system.
- Review Safety Analysis Reports (SARs) risk analyses, and operational analyses.
- Develop environment, safety, and health contract reforms that provide incentives for quality and timely performance and encourage innovative contracting approaches.
- Ensure the completion of timely and adequate NEPA reviews; ensure the consistency and quality of NEPA documents; and increase the efficiency of NEPA personnel.
- Streamline the environmental review process.
- Support the implementation of DOE-wide environment, safety, and health budget planning and execution processes to improve accountability of contractors for environment, safety, and health performance.
- Improve the information management function by enhancing the ability to provide quality environment, safety, and health information to the public, EH, DOE, and other stakeholders.
- Transition from a prescriptive compliance-based approach to a performance-oriented approach utilizing a standards-based, graded approach to enhance facility safety.
- Ensure that EH personnel receive necessary and comprehensive technical training to perform their assigned duties.
- Ensure that DOE concerns are considered in the development of environmental regulation.

PERFORMANCE MEASURES:

The performance measures related to environment, safety, and health activities are primarily qualitative rather than quantitative. Some performance measures are:

- Improved understanding of the health effects associated with nuclear weapons production, testing, and use within past, current, and future DOE activities.
- Reduced worker health and safety impacts; no fatalities and fewer serious injuries; fewer instances of significant worker exposures; and lower overall total exposures to radiological and toxicological materials.
- Fewer radiological and toxicological contamination events, fewer abnormal operating events, and fewer procedural violations.
- Improved environment, safety and health performance trends (e.g., decreased lost workdays due to occupational illness, injury; decreased number of personnel contaminated with radionuclides; reduced non-compliance with external environmental requirements; and improved pollution prevention).
- Decreased number of serious accidents where environment, safety and health policy is a root cause of the problem.
- Timely resolution of identified deficiencies and concerns associated with the operations of DOE occupational medical programs.

SIGNIFICANT ACCOMPLISHMENTS AND PROGRAM SHIFTS:

The Department has compiled an integrated Department-wide set of environment, safety and health performance measures and publishes a quarterly environment, safety and health performance indicator report to help ensure the safety and health of workers and the public and the protection and restoration of the environment.

Specific accomplishments and program shifts are defined within the respective business line descriptions that follow.

ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
(Dollars in thousands)
PROGRAM FUNDING PROFILE

<u>Sub-Program</u>	<u>FY 1997 Current Appropriation</u>	<u>FY 1998 Original Appropriation</u>	<u>FY 1998 Adjustments</u>	<u>FY 1998 Current Appropriation</u>	<u>FY 1999 Request</u>
<u>EH Non-Defense</u>					
Operating Expenses					
Technical Assistance	\$ 25,350	\$ 21,444	0	\$ 21,444	\$ 19,302
NEPA	3,500	3,000	0	3,000	3,000
Management & Administration	19,350	18,056	-782 ¹	17,274	15,300
Program Direction	<u>37,300</u>	<u>23,550</u>	<u>0</u>	<u>23,550</u>	<u>38,398</u>
Subtotal	\$ 85,500	\$ 66,050	-782	\$ 65,268	\$ 76,000
Rescission	-1,497	0	0	0	0
Adjustment (use of prior year balances)	<u>-1,421</u>	<u>0</u>	<u>-1,295</u>	<u>-1,295</u>	<u>0</u>
TOTAL EH NON-DEFENSE PROGRAMS	\$ 82,582	\$ 66,050	-2,077	\$ 63,973	\$ 76,000
TOTAL FTEs	301	172	0	172	309

¹ Training general reduction

ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
(Dollars in thousands)

PROGRAM FUNDING BY SITE

<u>Field Offices/Sites</u>	<u>FY 1997 Current Appropriation</u>	<u>FY 1998 Original Appropriation</u>	<u>FY 1998 Adjustments</u>	<u>FY 1998 Current Appropriation</u>	<u>FY 1999 Request</u>
Albuquerque Operations Office					
Los Alamos National Laboratory	\$ 275	\$ 100	\$ 0	\$ 100	\$ 0
Chicago Operations Office					
Argonne National Laboratory	1,950	985	0	985	725
Brookhaven Science Associates	816	720	0	720	690
Operations Office	<u>38</u>	<u>1,540</u>	<u>0</u>	<u>1,540</u>	<u>2,040</u>
Subtotal	2,804	3,245	0	3,245	3,455
Idaho Operations Office					
Idaho National Eng. & Env. Lab.	2,066	1,870	0	1,870	1,610
Operations Office	<u>3,599</u>	<u>2,850</u>	<u>0</u>	<u>2,850</u>	<u>2,810</u>
Subtotal	5,665	4,720	0	4,720	4,420
Nevada Operations Office					
Bechtel Nevada	104	0	0	0	0
Oak Ridge Operations Office					
Office of Scientific & Technical Information	293	245	0	245	110
Oak Ridge Institute for Science & Education	2,569	2,230	0	2,230	2,230
Lockheed Martin Energy Systems	260	250	0	250	220
Oak Ridge National Laboratory	<u>8,182</u>	<u>6,556</u>	<u>0</u>	<u>6,556</u>	<u>5,540</u>
Subtotal	11,304	9,281	0	9,281	8,100

ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
(Dollars in thousands)

PROGRAM FUNDING BY SITE

<u>Field Offices/Sites</u>	<u>FY 1997 Current Appropriation</u>	<u>FY 1998 Original Appropriation</u>	<u>FY 1998 Adjustments</u>	<u>FY 1998 Current Appropriation</u>	<u>FY 1999 Request</u>
Richland Operations Office					
Pacific Northwest Laboratories	7,187	4,480	0	4,480	3,830
Operations Office	<u>541</u>	<u>360</u>	<u>0</u>	<u>360</u>	<u>330</u>
Subtotal	7,728	4,840	0	4,840	4,160
 Rocky Flats Field Office					
Kaiser Hill Company	40	30	0	30	20
 Oakland Operations Office					
Lawrence Berkeley Laboratory	516	460	0	460	550
Lawrence Livermore National Laboratory	850	570	0	570	530
Operations Office	<u>729</u>	<u>1,024</u>	<u>0</u>	<u>1,024</u>	<u>1,000</u>
Subtotal	2,095	2,054	0	2,054	2,080
 Savannah River Operations Office					
Operations Office	14	10	0	10	10
 Washington Headquarters	55,471	41,770	-782 ¹	40,988	53,755
 Rescission	-1,497	0	0	0	0
Adjustment (Use of Prior Year Balances)	<u>-1,421</u>	<u>0</u>	<u>-1,295</u>	<u>-1,295</u>	<u>0</u>
 TOTAL	\$ 82,582	\$ 66,050	\$ -2,077	\$ 63,973	\$ 76,000

¹ Training general reduction

ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE

TECHNICAL ASSISTANCE

Program Performance Summary:

I. Mission Supporting Goals and Objectives

Technical Assistance within the Office of Environment, Safety and Health consists of the following:

Line Management Support focuses on improving safety, environmental protection, and health programs. These support efforts often involve the development of unique tools and approaches, because the mix of radioactive, hazardous, and toxic materials at DOE facilities is unique. Support efforts span the design, construction, operation, and decontamination and decommissioning of nuclear weapons production and research-related facilities; construction safety; work planning techniques to identify, evaluate, and eliminate hazards; and identification of technologies and innovative adaptations of existing practices. It also includes support to line management in developing WorkSmart Standards, safety and health requirements, and the continuation of departmental standards committee initiatives. To help ensure effective regulation and the safe operation of nuclear facilities and hazardous activities, DOE develops and implements nuclear safety policy requirements and standards, including DOE Orders, rules, guidance documents, and technical standards. In the development of nuclear safety requirements and standards, the Department interacts with other industrial, governmental, and international groups. In cases where DOE has unique nuclear conditions or hazards, particularly those involved in weapons production, DOE develops and applies its own DOE Technical Standards. These activities involve operation of the technical standards program in compliance with the National Technology Transfer and Advancement Act of 1995. The Office of Environment, Safety and Health develops and issues environmental policy, when needed because of events or new requirements pertinent to new legislation, regulations, or Executive Orders, or to protect the public and the environment when a deficiency in programs or operations is identified. The program consists of mandatory corporate environmental reporting.

Environment, Safety and Health Guidance supports the development of interpretations and guidance documents for safety and health issues and the environmental requirements of the Clean Air Act, the Clean Water and Safe Drinking Water Acts, Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Superfund Amendments and Reauthorization Act (SARA), Emergency Planning and Community Right to Know Act (EPCRA), and Radioactive Waste and Hazardous Substance Acts.

Interagency Representation monitors emerging environmental regulations that affect DOE operations and current laws (e.g., the Atomic Energy Act, the Clean Air Act, and the Pollution Prevention Act).

II. Funding Schedule

<u>Program Activity</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>\$ Change</u>	<u>% Change</u>
Line Management Support	\$20,544	\$16,604	\$15,027	\$-1,577	-9%
Environment, Safety & Health Guidance	2,100	2,160	1,775	-385	-18%
Interagency Representation	<u>2,706</u>	<u>2,680</u>	<u>2,500</u>	<u>-180</u>	-7%
Total	\$25,350	\$21,444	\$19,302	\$-2,142	-10%

ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE

TECHNICAL ASSISTANCE

III. Performance Summary – Accomplishments

FY 1997 **FY 1998** **FY 1999**

Line Management Support

- | | | | |
|--|--------|--------|--------|
| - Assist DOE line management in preventing exposures to hazardous and toxic materials by minimizing threats to worker safety and health, developing cost-effective solutions for use in potentially threatening conditions, and providing engineering controls. The first pre-production model of a heat stress monitor was field tested in FY 97 and will be available for purchase by DOE's contractors in FY1998/1999. The Liquid Air-Pack System that delivers breathing/cooling air to all parts of a fully encapsulating suit to maintain body core temperature was laboratory-scale tested in FY 1997; field testing is expected to be completed during FY 1999. Bench-scale testing of a near real-time personal multi-chemical exposure monitor began in late FY 1997, system integration and miniaturization to lapel-size will proceed in FY 1998, and testing will continue into FY 1999. | \$ 743 | \$ 900 | \$ 643 |
| - The EH Decontamination and Decommissioning (D&D) Project is a corporate crosscutting program to provide line managers with a set of high-utility, field-tested tools as part of its integrated safety management system for the safe and cost-effective conduct of D&D activities. The draft safety and health standards for D&D activities were developed in FY 1997, and a regulatory basis will be developed in FY 1998 to provide clarification of DOE expectations to accommodate external regulation of these activities. Technical workshops/meetings with line, field and contractor representatives will provide familiarity with the process of developing hazards analyses and identifying D&D specific issues. The issuance of the final technical standard for D&D will occur in FY 1998. In FY 1999, the final D&D technical standard will be implemented across the Department and support will be limited to a programmatic maintenance level to facilitate information exchange and implementation. | 1,100 | 650 | 300 |

III. Performance Summary - Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
Provide technical assistance to line managers in their development of site or facility specific D&D plans; resolution of nuclear safety issues evolving from D&D activities; ensuring the safety of D&D workers from radiation exposure; and application of lessons learned and good practices used by industry and the Nuclear Regulatory Commission and the International Atomic Energy Association.	\$100	\$ 200	\$ 100
- Develop, demonstrate and implement the WorkSmart Standards Closure Process. The application of this process will provide a 'Necessary and Sufficient' set of standards to ensure adequate protection for workers, the public and the environment against the hazards associated with a defined work scope and within a specific work area. In FY 1999, support to the development of specific WorkSmart Standards tailored to the work and condition of a particular facility will be reduced.	100	200	150
- This activity provides follow up on line management progress to correct safety deficiencies and remove hazards identified by several complex-wide vulnerability studies (e.g. Plutonium Vulnerability Study and the Highly Enriched Uranium Vulnerability Study). During FY 1999, vulnerability studies of critical safety issues to help prevent the occurrence of a nuclear incident within the DOE nuclear complex continues at the same level of effort as in FY 1998.	250	300	300

III. Performance Summary - Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
- The Department manages an Aviation Program with activity equal to that of a large regional airline. It operates more than 10,000 flights per year using 33 fleet aircraft, supplemented by charter and contract operations. EH is charged with the responsibility for aviation safety policy and assistance for the Department. This activity supports an accident prevention program for all field sites, communications infrastructure, operations policy, guidance and interpretation, hands-on vendor inspections, and operational reporting. Support to the HQ staff is provided by interagency agreements with the Department of Transportation and the Volpe National Transportation Systems Center. Using Volpe's assets, the DOE aviation staff determine the airworthiness and configuration of fleet and contractor aircraft, provide communications and data exchange of critical safety and operational information, and foster accident prevention in flight and ground operations. The FAA has no interest or jurisdiction over DOE flights and is not funded to support them. Therefore, DOE provides safety systems, accident prevention, policy, rules, and regulations by which aircraft must be operated in support of the Department. The Department's Aviation Incident Reporting System and Aviation Safety Awards Program are administered by this program and provide reports of activities as required by law.	\$350	\$350	\$350
- In FY 1999, the guidance and interpretation function for the areas of construction safety, electrical safety, fire arms safety, and fire protection will be consolidated with other Line Management Technical Assistance support. In FY 1998, these areas require only nominal support in the areas of information collection and analyses, maintenance of information data bases, maintenance of documents on-line, and technical communications. Departmental representation for these safety disciplines include national consensus bodies and advisory committees that are responsible for the development of standards, best management practices and other federal and industry-guidelines and regulations.	300	300	0

III. Performance Summary - Accomplishments (continued)

<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
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This activity includes four broad areas of support: radiation protection; DOE Worker Safety and Health Response Line; WorkSmart standards process and program implementation guidance for firearms safety, fire protection, and electrical safety; and safety and health (S&H) policy and issues pertaining to privatization. Radiation protection activities focus on providing: interpretations, amendments, and exemptions to 10 CFR 835; updated radiation protection guidance and standards; technical assistance to line management and DOE contractors on radiation protection; DOE's Bioassay Accreditation program; and analysis of radiation exposures to DOE workers. DOE's Bioassay Accreditation program is principally a procedural processing activity involved with the exemption process, although some assessment and assistance in the field is necessary to assure that the Bioassay Program is properly implemented. The DOE Worker Safety and Health Response Line is a service provided to DOE and contractor staff to resolve uncertainties regarding interpretations of regulations or DOE orders. The WorkSmart standards process is supported in the areas of firearms safety, fire protection, and electrical safety by assessing the need for new or revised safety criteria, data and analyses, and other services to the field. Prior to DOE being regulated by external entities, DOE field offices are responsible for the handling of privatizations requiring the divestiture of properties or the investment of private capital on DOE-owned lands. Privatization support includes: resolution of S&H jurisdictional issues; examination of S&H issues related to "downsizing," contract reform, and privatization activities; evaluation of S&H issues resulting from co-located privatized operations; evaluation of DOE's "landlord" responsibilities with respect to worker S&H; maintenance of a database of DOE sites and facilities for which jurisdiction has been transferred to OSHA; independent assessment of regulatory and resource impacts; and working with the DOE legal staff to assess areas where lapses in safety oversight coverage may exist.

\$ 1,400	\$ 1,200	\$ 1,200
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Chronic beryllium disease (CBD) has been shown to be a health problem at DOE defense and laboratory sites where beryllium was used in quantities. Numbers of former DOE beryllium workers have become immunologically sensitized and others have progressed to diagnosed disease. This activity supports a Secretarial-mandated policy and exposure control development and execution program whose objective is to define safe operating parameters, to establish improved medical surveillance programs, and to facilitate information exchange and research for beryllium exposure control. This program, the Chronic Beryllium Disease Prevention Program, was initiated in FY 1997 with the efforts of a small Federal staff cadre. It will focus on interim policies, exposure prevention strategies, and rule development in FY 1998, and on comprehensive program implementation starting in FY 1999. Specific activities will include program implementation guidance and support, field program collaborative reviews and evaluations, and expanded health surveillance.

0	0	850
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III. Performance Summary – Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
- DOE has significant chemical operations and experienced several serious mishaps in FY 1997 that require extensive review and field upgrades in chemical safety programs. A chemical vulnerability study and action plan introduced a 10-step process for improving handling, storage and clean up of chemical facilities and sites. DOE is incorporating the value-added aspects of Responsible Care and best management practices from the chemical industry into the DOE system for safety management. This activity serves as an intermediary between sites to encourage sharing of information and is charged with keeping abreast of best practices in DOE and industry, determining individual site needs, and supporting the transfer of best practices according to the needs. The program provides numerous opportunities for interactions and mentoring with industry managers and ES&H experts; a process which will be expanded in FY 1999 to address programmatic gaps identified at DOE field sites through the review process.	\$ 400	\$ 400	\$ 600
- The DOELAP (Department of Energy Laboratory Accreditation Program) is mandated by regulation, 10 CFR 835, and is similar to the Nuclear Regulatory Commission (NRC) private sector NAVLAP (National Voluntary Laboratory Accreditation Program). The DOELAP certifies each DOE facilities' ability to accurately determine a worker's exposure to radiation as measured by individual dosimeters (radiation detection badges) and analysis of urine and fecal samples. This is the day-to-day operations portion of the DOELAP and includes irradiating dosimeters and mailing them to facilities, calibration phantoms maintenance, preparation and processing of artificial urine and fecal samples, plus all the many support activities such as record maintenance and data collection. DOELAP accreditation is essential to demonstrate to workers that their radiation exposure is being measured accurately. A comprehensive, quality tested, internal dosimetry package will be provided to all DOE facilities for the calculation of internal radiation exposures to workers. Finally, extremity dosimetry will be incorporated into the existing whole body personnel dosimetry accreditation program and accreditation technical standards based upon national consensus standards will be developed.	2,400	2,400	2,400

III. Performance Summary – Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
- The Voluntary Protection Program (VPP) is designed to encourage DOE sites to achieve excellence in their safety and health programs. One means to assist a site in preparing for program participation is by partnering Occupational Safety and Health Administration (OSHA) VPP Star Sites from all sectors of the commercial arena with DOE sites so that DOE can learn and benefit from their efforts. For the VPP, Safety and Health programmatic excellence is recognized on a site wide basis for qualified sites within the DOE complex. By meeting established criteria, DOE sites can participate in the program. Program participants are re-evaluated on set schedules to ensure continued adherence to program elements. The DOE-VPP Team provides contractor application processing; selection process for onsite review teams; evaluation quality control; technical assistance to DOE contractors through its customer representative and outreach programs; outreach coordination/networking; training programs; the development of promotional activities and materials; and, interagency liaison. Onsite evaluations for four sites are to be performed in FY 1998. In FY 1999 onsite evaluations for four additional sites are expected. Outreach Program assistance is expected to increase with additional sites entering the program.	\$ 500	\$ 500	\$ 500
- EH established a DOE-wide Federal Employees Occupational Safety and Health (FEOSH) program mandated by the OSH Act, DOE Order 440.1, and 29 CFR 1960. The FEOSH program is prevention-oriented and provides expertise and tools to DOE line managers and field elements for developing and implementing site-specific safety and health programs for their Federal employees. The FEOSH program focus is to leverage line management resources by providing hazard intervention strategies that target particularly problematic safety and health issues. The FEOSH program also supports field elements providing specialized technical expertise not available locally; model programs that can be used for several sites; and assistance in the resolution of employee Safety and Health concerns.	200	200	200

III. Performance Summary – Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
- Enhanced Work Planning (EWP) is a process designed to improve the efficiency of performing work and simultaneously embed worker safety and health practices. The EWP principles are applied to all work performed at DOE sites. This activity communicates EWP lessons learned among sites, and assists the field in developing a standardized approach to EWP, including work planning procedures, tools for better hazard analysis, hazard control strategies, and improved processes to target employee monitoring and identify health trends. EWP is now being implemented on a sitewide basis at some sites where it was begun as a pilot program and other DOE sites are beginning new pilots. Professional Federal staff have facilitated in the downward trend of this program by sharing lessons learned, and sharing work planning procedures and software tools developed at EWP sites. In FY 1998, the majority of DOE sites will be implementing EWP programs. Fewer sites will require implementation of EWP in FY 1999 which will thereby reduce the support required to “maintain support” level.	\$ 1,650	\$ 1,700	\$ 300
- Self-Assessment is an integral part of the Integrated Safety Management policy and program at DOE. The self-assessment module will be developed in FY 1998, folded into the overall process and pilots developed in the field. Improving self-assessment programs and integrating them into daily work process and practices translates directly into the cost savings as a result of improved productivity, efficiency, and safety. During FY 1999, it is anticipated that initial results from the demonstration efforts will have demonstrated substantial value from testing a wide range of tools at various DOE sites. Efforts in FY 1999 will focus on moving from testing of tools in selected organizations to formal implementation of the tools site wide at the selected demonstration sites. The effort will sustain the Department’s ongoing implementation of Integrated Safety Management Systems at demonstration sites. EH will work with the demonstration sites and Headquarters Program Offices to establish a self-sustaining DOE complex wide project team that will serve as the focal point for promoting improvement of self-assessment across the DOE complex. In addition, EH will develop an innovative approach to present results from the initiative to additional DOE field elements along with approaches to “jump start” improvements in self-assessment at additional DOE sites.	0	0	600

III. Performance Summary – Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
- Evaluate new nuclear material technologies for potential application to DOE nuclear operations to improve the safety of tritium handling, plutonium packaging and storage, and spent nuclear fuel stabilization, processing, and interim storage.	\$ 150	\$ 150	\$ 100
- Conducted DOE certification reviews for packaging and transporting nuclear and hazardous materials, including WIPP acceptance criteria; provided on-site technical assistance. This activity was transferred to EM for management in FY 1997 and is budgeted by EM in FY 1998 and FY 1999.	4,300	0	0
- DOE's policy is to authorize contractors to conduct high hazard nuclear operations only after the hazards have been carefully analyzed to determine the potential for accidents, their consequences, and the controls necessary to prevent or mitigate them. This is documented in a Safety Analysis Report and the quality of this report directly affects the safe operation of a facility through the implementation of the prescribed controls. Approximately 10 authorization bases covering the design, construction, operation, and D&D of DOE facilities are evaluated annually by EH to ensure their conformance to modern safety standards. In addition, the potential effects of operations on the environment are evaluated to ensure compliance with the National Environmental Policy Act. EH reviews approximately 10 Environmental Impact Statements (EISs) and Environmental Assessments (EAs) annually and advises the appropriate Secretarial Office of the results before a Record of Decision is issued. During FY 1999, the review of EISs and EAs and evaluation of authorization bases will continue at the same level of effort as in FY 1998.	400	500	500

III. Performance Summary – Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
- Provide at a reduced level of effort specialized nuclear safety engineering support to program, field, and Secretarial offices in dealings with the challenges of changing former weapons production facilities to storage and waste management activities; stabilizing nuclear materials not recycled due to production cessation; revising the authorization basis for existing facilities to convert to a standards based approach consistent with modern safety standards; implementing a new regulatory framework for DOE nuclear facilities; dismantling nuclear weapons; and disposing/storing fissionable materials. In addition, as the corporate resource for expertise in nuclear safety discipline, assistance will also be provided to Hanford, Savannah River, Oak Ridge, Los Alamos, Idaho National Engineering and Environmental Laboratory complex and Fernald and Mound on a number of major nuclear initiatives. This specialized engineering assistance significantly contributes to improving the safety of facility operations throughout the DOE nuclear complex.	\$ 1,125	\$ 1,400	\$ 1,200
- Provide expert technical support in the areas of analyses of hazards, consequences and risks to workers, the public and the environment to multiple committees and working groups on environmental and radiological regulatory issues and on Environmental Impact Statements.	50	50	50
- The DOE complex has many dams and water impoundments, 8 of which are classified by Federal guidelines as having high or significant hazards. EH manages DOE's Dam Safety Program in accordance with the guidelines established by the Federal Emergency Management Agency and oversees the safety inspection of these dams. In addition, EH discharges the Department's responsibility of ensuring that the nuclear aspects of NASA's Pathfinder mission to Mars and the Cassini mission to Saturn are conducted within acceptable safety margins. Both of these missions carry plutonium 238 for use as power and heat sources. The funding is reduced in FY 1999 commensurate with the reduction in the number of dams with significant hazards that require inspection.	300	325	275

III. Performance Summary – Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
Manage an Occurrence Reporting System similar to the Nuclear Regulatory Commission for notifying DOE management of nuclear events. These data are compiled and analyzed in the context of deriving the lesson(s) to be learned to prevent recurrence of a similar event. The lessons learned are disseminated throughout the DOE nuclear community through the publication of an Operating Experience Weekly Summary. When warranted, Safety Notices are also published to provide more in-depth information on significant safety problems and on generic or recurring events. Data are also collected and analyzed on several dozen performance indicators that highlight activities directly affecting worker safety and protection of the environment. These data are assimilated into a quarterly Performance Indicator Report which provides DOE management with the progress made towards improving worker safety and protection of the environment at DOE sites. The reduced funding in FY 1999 will be accommodated through improvements in operational efficiencies.	\$ 2,311	\$ 2,311	\$ 2,189
Provide specialized nuclear radiation expertise to line management in resolving site/facility specific radiological health and safety problems and in improving the safety of workers involved with nuclear operations. Activities include providing advice on implementing 10 CFR 835, developing appropriate radiological engineering capabilities, instituting workshops to train personnel, and integrating essential safety controls into the site's planning, scheduling, conduct of radiological activities	300	300	200
- Provide environmental policy advice and interpretations on DOE's rule on radiation standards to protect the public and the environment.	50	93	50
- Maintain up-to-date DOE-wide policy for radiation protection of the public and the environment and general environmental protection. Completed projects associated with improved treatment of high use radiation accident victims. Provide expert consultation and assistance for radiation accident patient management.	75	75	75

III. Performance Summary – Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
DOE is self-regulating and as such, is responsible for establishing the standards to which its contractors must adhere in performing nuclear related and non-nuclear operations. EH is charged with this responsibility and creates and revises the policies and standards necessary to ensure the safety and protection of workers, the public, and the environment in the performance of facility operations. These standards are issued in the form of rules, orders, and various guidance documents, each of which is designed to improve or enhance safe and environmentally benign operations. In addition, interface is maintained with the Defense Nuclear Facility Safety Board, the Nuclear Regulatory Commission, and other governmental and industry groups on matters concerning nuclear safety and regulation.	\$ 1,845	\$ 1,845	\$ 1,845
- Review environmental documents prepared by line management to verify adequacy and validity of the environmental technical information.	<u>145</u>	<u>255</u>	<u>50</u>
Total Line Management Support	\$20,544	\$16,604	\$15,027

ES&H Guidance	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
- Provide environmental guidance documents and workshops (e.g., guides, information briefs, handbooks) to assist programs in understanding and implementing environmental requirements in the following areas: Clean Air Act, Water Acts, Waste Cleanup Acts, Radioactive Waste Acts, Hazardous Substance Acts, and Pollution Prevention Act.	\$ 1,500	\$ 1,760	\$ 1,400
- Issue rule 10 CFR 834, Radiation Protection of the Public and the Environment. Review and update policies in the Environmental Protection Order.	100	50	25
- Provide technical and liaison support to the Department's Standards Committee. This support includes defining criteria for establishing an acceptable standards program for operating facilities and assisting line organizations in incorporating these criteria in the development of standards-based planning and work.	<u>500</u>	<u>350</u>	<u>350</u>
Total ES&H Guidance	\$2,100	\$2,160	\$1,775
Interagency Representation			
- Develop and represent DOE's position on emerging environmental and radiation regulations to ensure DOE's concerns are considered.	743	880	1,000

III. Performance Summary – Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
- The transactional interface with external oversight is the main focus of this program element. This currently consists of interface with the Defense Nuclear Facility Safety Board (DNFSB). These activities require development, coordination and preparation of responses to DNFSB recommendations, technical papers, reports, and requests for information, and function as the management sponsor and point of contact for the “Radiation Protection Qualification Criteria” in the Departments’ response to Recommendation 93-3. In FY 1997 and FY 1998, site decision process and criteria will be determined to establish worker protection programs at five different site across the complex in support of closure on DNFSB Recommendation 95-2. In FY 1999, activities will focus on providing DOE headquarters interpretation and support for DNFSB interface relating to field execution of 10 CFR 835 (Radiation Protection), with field implementation of training programs established in response to DNFSB recommendation 91-6, and with adverse trends and events at particular sites involving radiological contaminations, internal over exposures, and worker protection criteria.	\$ 400	\$ 400	\$ 300
Prior to an overall transition to external regulation, there are numerous privatizations and leasing of DOE facilities that entail switching regulatory jurisdiction from DOE to OSHA, authorized states, and to the Nuclear Regulatory Commission (NRC). This ongoing transition requires identification, review and resolution of implementation issues. Beginning in FY 1997, infrastructure will be developed to provide a process control for transition from DOE to external regulation and transition management mechanisms will be established. The largest effort to complete the infrastructure development will occur in FY 1998. In early FY 1997, the National Academy of Public Administration (NAPA) study, entitled "Ensuring Worker Safety and Health Across the DOE Complex," was published and distributed. The OSHA enforcement pilot at DOE's Argonne National Laboratory was completed in mid-FY 1997, and a database of privatization activities that have been sent to Federal OSHA for transfer of jurisdiction has been developed. Interactions with OSHA were begun in FY 1997 to identify alternatives and measures to address safety and health issues associated with facilities that have been privatized but not yet officially accepted by OSHA. FY 1998 activities included: conducting outreach activities for new OSHA rule on recordkeeping; performing "sunset" review of 1992 MOU with OSHA; revising MOU as appropriate to address all issues affecting the transition to external enforcement; and facilitating the process of dealing with DOE legacy S&H issues arising from external regulation (e.g., who is responsible, DOE or	1,300	1,400	1,200

III. Performance Summary – Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
contractor, who pays for corrective actions, what are the priorities, and the negotiation process with OSHA). FY 1999 proposed activities include supporting pilot regulatory activities with OSHA at least, one DOE site (e.g., Oak Ridge) and continue analyses and resolution of regulatory transition issues.			
- Identified, reviewed and resolved issues concerning external regulation of worker health and safety that include jurisdictional issues between external regulators and DOE, an orderly transition to external enforcement, coverage of privatized facilities, deregulation of facilities, and major changes to internal safety management and oversight functions. This was completed in FY 1997.	<u>263</u>	<u>0</u>	<u>0</u>
Total Interagency Representation	<u>\$2,706</u>	<u>\$2,680</u>	<u>\$2,500</u>
Total Technical Assistance	<u>\$25,350</u>	<u>\$21,444</u>	<u>\$19,302</u>

Explanation of Funding Changes FY 1998 to FY 1999

The overall funding reduction for Technical Assistance of \$2,142,000 is the result of the following program adjustments:

- Conclusion of testing and commercialization of Liquid Air-Pack system. (-\$257,000)
- Achieve savings in facilitating the final implementation of the D&D technical standard and information exchange. (\$-350,000)
- Reduce technical assistance to line managers in developing site/facility specific D&D plans and in resolving D&D issues. (-\$100,000)
- Reduce on-going support to teams of DOE and contractor personnel in developing site/facility specific sets of WorkSmart Standards. (-\$50,000)
- Reduction due to combining construction safety with the functional areas of electrical, fire arms, and fire protection safety, and converting the support for the Safety and Health Response line from contractor to full-time Federal EH staff. (-\$300,000)

Explanation of Funding Changes FY 1998 to FY 1999 (continued)

- Increase for beryllium exposure control resulting from expansion of FY 1997 Secretarial mandate to develop internal DOE policy on beryllium exposure control and expanded health surveillance program for current and former workers potentially exposed to beryllium. Beryllium is a toxin that can lead to a debilitating, chronic lung disorder that, in the long run, can be fatal. (+\$850,000)
- Expand chemical safety program in light of a serious accident involving a chemical explosion at the Plutonium Finishing Plant at Hanford to encompass strengthened field assistance and support, as well as expanded private industry coordination. (+\$200,000)
- Based on the success of Enhanced Work Planning (EWP), DOE field elements and their contractors are picking up much of the cost of EWP implementation. Only program maintenance such as multi-site workshops for exchange of experience requires funding. (-\$1,400,000)
- Increase need for self-assessment improvement for effective implementation of that facet of DOE's Integrated Safety Management System (ISMS). The self-assessment program encompasses major field sites implementing ISMS in FY 1999, including aging collaborative projects with the national laboratories and defense and cleanup sites. (+\$600,000)
- Decrease in evaluations of new nuclear materials technologies. (-\$50,000)
- Reduce specialized nuclear safety engineering expertise in support of program, field, and Secretarial office initiatives and resolution of safety issues. (-\$200,000)
- Reduced number of DOE dams with high or significant hazards that require inspection. (-\$50,000)
- Achieve savings from improvements in information analysis, management and dissemination of Occurrence Reporting lessons learned. (-\$122,000)
- Reduce nuclear radiation expertise to line management in resolving site/facility specific radiological problems. (-\$100,000)
- Achieve savings from improvements in dissemination of environmental policy advice and interpretations on DOE's rule on radiation standards (-\$43,000)

- Achieve savings from improvement in environmental documents prepared by line management. (-\$205,000)

Explanation of Funding Changes FY 1998 to FY 1999 (continued)

- Reduced need for technical assistance in support of programmatic environmental impact statements and guidance documents. (-\$360,000)
- Reduce support to rule 10 CFR 834, Radiation Protection of the Public and the Environment since it has been issued. (-\$25,000)
- Develop and provide DOE's position on emerging environmental and radiation regulations. (+\$120,000)
- Interface activities with the Defense Nuclear Facilities Safety Board will decrease as Board Recommendations are closed out. (-\$100,000)
- Decrease due to significant achievements made in the transition to external regulation of worker health and safety. (-\$200,000)

ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE

NATIONAL ENVIRONMENTAL POLICY ACT

Program Performance Summary:

I. Mission Supporting Goals and Objectives

The NEPA program supports the implementation of the Department's proposed activities by providing the corporate leadership needed to assure compliance with the National Environmental Policy Act and related environmental review requirements. The goal of the NEPA program is to foster sound departmental planning and decision-making and to build public trust through effective process implementation. NEPA program objectives include: (a) ensuring the timely and adequate completion of NEPA reviews through technical assistance, independent policy review, and approval recommendations for major programmatic environmental impact statements (EISs) sitewide and other EISs, and related NEPA documents; (b) ensuring the consistency and quality of NEPA documents and increasing the efficiency of NEPA personnel by determining and responding to customer needs; (c) issuing guidance on selected technical and policy topics; (d) conducting workshops for Headquarters and field NEPA personnel; and (e) participating in NEPA process improvement teams and other initiatives that foster continuing improvement of the NEPA process. Another objective is to streamline the environmental review process by issuing revised regulations and DOE Orders to reduce costs and regulatory burdens so that the process works better, costs less, and is more useful to decision makers and the public.

II. Funding Schedule

<u>Program Activity</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>\$ Change</u>	<u>% Change</u>
NEPA	\$ 3,500	\$ 3,000	\$ 3,000	\$ 0	0%

III. Performance Summary - Accomplishments

<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
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NEPA

- Save more than \$26 million over 5 years of the Department's NEPA compliance costs by issuing and implementing phase II of NEPA Contract Reform Guidance. Provide technical assistance in the preparation of major programmatic environmental impact statements, site-wide and other environmental impact statements, and related documents.	\$2,500	\$2,000	\$2,000
- Provide policy reviews, technical assistance, and quality control in the preparation of major programmatic environmental impact statements, site-wide and other environmental impact statements, and related documents.	<u>1,000</u>	<u>1,000</u>	<u>1,000</u>
Total NEPA	<u>\$3,500</u>	<u>\$3,000</u>	<u>\$3,000</u>

ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE

MANAGEMENT AND ADMINISTRATION

I. Mission Supporting Goals and Objectives

Management and Administration within the Office of Environment, Safety and Health consists of the following:

Management Planning establishes DOE-wide clear environmental, safety and health priorities and to manage all activities in proactive ways that effectively and significantly increase protection to the environment and to public and worker safety and health. This goal is intrinsic to and permeates all Departmental missions of assuring nuclear deterrence, conducting research, energy security, dismantling surplus facilities, and cleaning up legacy waste. In support of these missions, Management Planning provides the DOE corporate leadership and management tools and processes to enhance the quality and cost-effectiveness of environment, safety, and health program performance of DOE line organizations. This includes providing: consistent identification of needed Departmental environment, safety, and health activities; risk-based priority setting; effective budget decision making and allocation of environment, safety, and health resources; and improved accountability for environment, safety and health performance. To achieve this goal, it is imperative that the Department's business processes for defining mission objectives, assuring that work objectives are compatible with mission objectives, establishing and modifying contracts, obtaining and allocating resources, managing execution, and monitoring performance consider all aspects of safety management. Another goal of Management Planning is to institutionalize safety management accountability mechanisms for all DOE operating contractors and to improve performance of operating organizations in managing significant environment, safety, and health risks in a cost-effective manner. Management Planning works with all DOE line programs, both Headquarters and the field. Objectives include: (1) contractor accountability for environment, safety and health performance, including establishment of performance commitments; (2) establishment of safety management systems, and (3) establishment of specific contractual performance measures, based on the site and mission, that are tied directly to contractor rewards for performance.

Information Management maximizes the sharing and efficient use of environment, safety, and health data and information throughout the DOE complex. The program seeks to identify and facilitate access to data and information vital to the successful conduct of the EH programs and activities by maintaining and integrating resources to support the reporting, tracking, trending, analysis, and dissemination of environment, safety, and health data. The goal of this activity is to provide and maintain an integrated environment, safety and health information management program, thereby providing effective and efficient access to critical environment, safety and health data on such aspects as safety occurrences, environmental and health impacts, radiation exposure, performance indicators, epidemiology, and environment, safety and health management.

I. Mission Supporting Goals and Objects (continued)

Technical Training and Professional Development assures that EH staff are properly trained to perform their duties related to environment, safety, and health matters in accordance with current DOE policy, procedures, and professional standards. This is accomplished through the development and maintenance of an environment, safety, and health training infrastructure; EH staff development programs in the areas of professional, technical, and information management proficiency; fellowships and grants to further industrial hygiene and health physics disciplines; specialized environment, safety, and health training as required for DOE employees; and development of safety and health technical qualification standards for DOE-wide use.

II. Funding Schedule

<u>Program Activity</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>\$ Change</u>	<u>% Change</u>
Management Planning	\$ 4,336	\$ 4,000	\$ 1,800	\$ -2,200	-55%
Information Management	10,014	9,300	9,300	0	0%
Technical Training & Professional Development	<u>5,000</u>	<u>4,756</u>	<u>4,200</u>	<u>-556</u>	-12%
Subtotal	\$ 19,350	\$ 18,056	\$ 15,300	\$ -2,756	-15%
Adjustment (general reduction)	<u>0</u>	<u>-782</u>	<u>0</u>	<u>782</u>	0
Total	<u>\$ 19,350</u>	<u>\$ 17,274</u>	<u>\$ 15,300</u>	<u>\$-1,974</u>	<u>-11%</u>

III. Performance Summary - Accomplishments

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
<u>Management Planning</u>			
Institutionalized and integrated environment, safety and health risk-based planning and budgeting into line program risk-management activities.	\$ 1,500	--	--
Utilize a risk-based prioritization approach to review line program environment, safety and health budgets and continue to ensure that all risk-significant environment, safety and health issues are adequately addressed in the Department's budget.	1,500	1,400	1,100
Extend the DOE-wide ES&H management planning process from planning and budgeting to include program execution and tracking to improve contractor accountability for performance as part of integrated ES&H management and monitor achievement of major commitments. Cost-savings are accomplished through efficiencies and enhancements.	--	2,600	700
Institutionalized environment, safety and health contract language into DOE Acquisition Regulation (DEAR) clauses; ensured that the language is incorporated into new operating contracts; developed ES&H selection criteria for Request for Proposals (RFP's) issued during the year, and improved the ES&H component of the Scopes of Work for each site and major facility.	<u>1,336</u>	--	--
Total Management Planning	\$4,336	\$4,000	\$1,800

III. Performance Summary - Accomplishments (continued)

FY 1997 **FY 1998** **FY 1999**

Information Management

Continue the management of environment, safety and health data and information by (1) ensuring the identification, publication and quality of critical environment, safety and health data, (2) integrating information technologies to support ES&H reporting, tracking, and trending systems, (3) maintaining information management systems and infrastructure to support the Department's Occurrence Reporting and Processing System, Radiation Exposure Monitoring System, Computerized Accident/Incident Reporting System, Performance Indicator Data System, Non-Compliance Tracking System, and other databases critical to the management of ES&H throughout the complex.

\$4,933 \$4,807 \$4,807

Apply Web-based technologies available through EH's Technical Information Services to make environment, safety and health data and information more rapidly and reliably available to the environment, safety and health community by providing electronic access to environment, safety and health publications and databases that support the Department's NEPA, Oversight, Lessons-Learned, Fire Protection, Worker Health & Protection, Chemical Safety, International Health Studies, Enforcement and Voluntary Protection programs.

5,081 4,493 4,493

Total Information Management

\$10,014 \$9,300 \$9,300

Technical Training and Professional Development

Continue to develop training capabilities that improve the technical competency and skills mix of EH staff to more effectively implement the overall EH mission and programs.

\$ 400 \$ 400 \$ 400

Support grants, fellowships, and training programs at colleges and universities to ensure the education and development of the future DOE technical workforce and to provide technical information which is beneficial to DOE-EH programs.

3,400 3,400 3,400

III. Performance Summary - Accomplishments (continued)

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
Specialized environment, safety, and health training for DOE workforce.	<u>1,200</u>	<u>956</u>	<u>400</u>
Total Technical Training and Professional Development	<u>\$5,000</u>	<u>\$4,756</u>	<u>\$4,200</u>
Subtotal Management and Administration	<u>\$19,350</u>	<u>\$18,056</u>	<u>\$15,300</u>
Adjustment (general reduction)	<u>0</u>	<u>-782</u>	<u>0</u>
Total Management and Administration	<u>\$19,350</u>	<u>\$17,274</u>	<u>\$15,300</u>

Explanation of Funding Changes FY 1998 to FY 1999

The overall funding reduction for Management and Administration of \$ 2,756,000 is the result of the following program adjustments. The increase of \$782,000 in FY 1999 reflects no general reduction.

- Efficiencies in providing environment, safety and health site performance models. (-\$1,900,000)
- Completion of activity through efficiencies in monitoring new contract environment, safety and health performance objectives and measures. (-\$300,000)
- Efficiencies in providing specialized environment, safety and health training. (-\$556,000)

DEPARTMENT OF ENERGY
FY 1999 CONGRESSIONAL BUDGET REQUEST
ENERGY SUPPLY
(Tabular dollars in thousands, Narrative in whole dollars)
ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
PROGRAM DIRECTION

I. Mission Supporting Goals/Ongoing Responsibilities:

Program Direction in this account provides overall direction and administrative support for Environment, Safety and Health (EH) non-defense programs to ensure that all operations are conducted in the most efficient, effective manner.

Program Direction in this account has been grouped into three categories:

Salaries and Benefits provide funding for a Federal staff who have the technical expertise required to carry out the essential EH mission. The EH mission requires experts to develop overall environment, safety and health policy for DOE sites and facility operations; to provide a central and coordinated source of technical expertise to all field elements; to provide a central clearing house for information, analysis and feedback regarding new efforts, present activities, and unforeseen occurrences taking place at the multitude of diverse facilities within the DOE complex; to provide the Department with independent oversight capability as well as health studies endeavors; and perform activities relative to environment, safety and health programs across the DOE complex.

Travel includes all costs of transportation, subsistence, and incidental travel expenses for EH's Federal employees in accordance with Federal Travel Regulations. This also includes travel costs associated with the permanent change of duty station.

Other Related Expenses provides for the EH Working Capital Fund. The Working Capital Fund provides for non-discretionary prorated costs for items such as space utilization, computer and telephone usage, mail service, and supplies.

Support Services are not provided for in this decision unit. EH's support services have been reduced based on Congressional direction.

**ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
PROGRAM DIRECTION
(Dollars in thousands)**

II. Funding Table:

	FY 1997 Current <u>Appropriation</u>	FY 1998 Current <u>Appropriation</u>	FY 1999 <u>Request</u>	<u>\$ Change</u>	<u>% Change</u>
<u>Headquarters</u>					
Salaries and Benefits	\$ 30,949	\$ 16,811	\$ 31,283	+\$ 14,472	+86 %
Travel	1,555	1,275	1,500	+225	+18%
Other Related Expenses	<u>4,796</u>	<u>5,464</u>	<u>5,615</u>	<u>+151</u>	+3 %
TOTAL	\$ 37,300	\$ 23,550	\$ 38,398	+\$ 14,848	+63 %
Full Time Equivalents	301	172	309		

**ENVIRONMENT, SAFETY AND HEALTH NON-DEFENSE
PROGRAM DIRECTION
(Dollars in thousands)**

III. Performance Summary

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
Salaries and Benefits:			
Salaries and Benefits are changed to reflect the revised FTE split between Energy Supply and Other Defense Activities. Overall, salaries and benefits have been reduced in line with a FTE reduction of 20 (5%).	\$ 30,949	\$ 16,811	\$ 31,283
Travel:			
Overall, EH travel requirements have been reduced by \$275,000 in line with the overall reduction in EH Federal staff	1,555	1,275	1,500
Support Services:			
Given the unique nature of the Environmental Safety and Health Program, support services are not provided for in this decision unit.	0	0	0
Other Related Expenses:			
This provides for necessary increases in the EH Working Capital Fund (Administered by the Office of Human Resources, HR) which covers non-discretionary prorated costs such as space utilization, computer and telephone usage, mail service and supplies.	<u>4,796</u>	<u>5,464</u>	<u>5,615</u>
Total Program Direction	\$ 37,300	\$ 23,550	\$ 38,398

IV. Explanation of Funding Changes FY 1998 to FY 1999

- Salaries, benefits, and travel requirements are increased commensurate with the shift in Federal staff from EH's Other Defense Activities Appropriation (+\$ 14,697,000). This increase actually reflects a decrease of costs for 20 FTEs.
- Working Capital Fund increases by 2.8% per the Department's projected determination of FY 1999 costs (+\$151,000).